THE ECOLOGICAL MOTIVATION OF TOURISTS AS A DETERMINANT OF THE TOURISTS' LOYALTY

Majda Bastič
University of Maribor, Faculty of Economics and Business
Razlagova 14, SI-2000 Maribor
Phone: +386 2 2290307; E-mail: majda.bastic@uni-mb.si

Slavka Gojčič
Go-spa S. d.o.o
Mariborska cesta. 7, SI-2250 Ptuj
Phone: +386 31 365495; E-mail: slavka.gojcic@gospa.si

Abstract
Despite the significant impact of environment on the attractiveness of tourist destination, environmental stewardship is not always the top priority in the hotel industry as one of the most energy-intensive sectors of the tourism industry which contributes to the increasing quantity of air pollutants. Therefore, this study investigates the impact of ecological pull motives and service quality on the tourists' loyalty to eco-hotels. The tourists spent their holidays in Austrian hotels with ecolabel and in Slovenian hotels were targeted and a total of 611 tourists participated in the study. The study reveals that the perceived service quality and eco-behaviour of hotel staff are the main determinants of the tourists' loyalty. The comparison analysis between Austrian and Slovenian hotels indicates that the guests of Austrian hotels with ecolabel are more loyal and ecologically motivated than guests of Slovenian hotels without ecolabel.
Key words: *Loyalty, Ecological motivation, Hotel service quality, Tourism*

1. INTRODUCTION

The hotel industry has consumed substantial quantities of energy, water and non-durable products, which has all been resulted in negative impacts of hotel facilities on the environment. It was estimated that a typical hotel has annually released between 160 and 200 kg of CO_2 per m^2 of room floor area, it has consumed 39 TWH of energy, from 170 to 360 litres of water per night, and has produced in excess of 1 kg of waste per guest per day, which has resulted in tons of waste each month. A large proportion (50-60 percent) of the materials that constitute this waste could be recycled or reused. Best practices in waste minimization and recycling have shown that waste generation can be limited to 50 g of unsorted waste per guest-night (Bohdanowicz, 2005).

In recognition of environmental degradation, hotel managers must be willing to act in an environmentally responsible manner. In this respect, a hypothesis was put forward stating that environmental attitudes of hoteliers will be rewarded by the loyalty of their guests especially by the increasing group of ecotourists. The relationship between loyalty and satisfaction as well as the service quality was investigated in different studies. To the best of the author's knowledge, no study has investigated ecological motives and their impact on the tourists' loyalty to eco-hotels. Therefore, we focused our study on ecological motives and tourists' experience of service quality as the drivers of the tourists' loyalty to eco-hotels for two groups of hotels, one with an ecolabel and the other one without it. It was expected that the hotels with the ecolabel attract the

tourists with higher level of the ecological motivations and that the tourists who spent their holiday in the hotels with ecolabel are more loyal than tourists of hotels without it.

2. THEORETICAL OVERVIEW OF CONSTRUCTS

2.1. Loyalty

The concept and degree of loyalty is one of the critical indicators used to measure the success of marketing strategy (Flavian, Maritnez, & Polo, 2001) as loyal customers that indulge in repeat purchases are the bedrock of any business (Caruana, 2002). Loyalty has been thought of as one of the major driving forces in the competitive market (Dimanche and Havitz, 1994). The degree of tourists' loyalty to a destination is reflected in their intentions to revisit the destination and their recommendation to others (Yoon and Uysal, 2005). Zeithaml, Berry & Parasuraman (1996) suggested that behavioural intentions were indicators, which showed whether customers had remained with or had defected from the organisation.

Loyalty is a multidimensional construct that has been conceptualised in many different ways in the marketing literature. Generally, loyalty has been measured in one of the following ways: (1) the behavioural approach, (2) the attitudinal approach, and (3) the composite approach (Jacoby & Chesnut, 1978). The initial research emphasised the behavioural dimension of loyalty.

Behavioural approach is related to consumers' brand loyalty and has been operationally characterized as sequence purchase, proportion of patronage, or probability of purchase. This loyalty measurement does not attempt to explain the factors that affect customer loyalty (Dick and Basu, 1994).

In the attitudinal approach based on consumer brand preferences or intention to buy, consumer loyalty is an attempt on the part of consumers to go beyond overt behaviour and express their loyalty in terms of psychological commitment or statement of preference (Yoon and Uysal, 2005). Tourists may have a favourable attitude toward a particular product or destination, and express their intention to purchase the product or visit the destination. Thus, loyalty measures consumers' strength of affection toward a brand or product, as well as explains an additional portion of unexplained variance that behavioural approaches do not address (Backman & Crompton, 1991).

Lastly, the composite or combination approach is an integration of the behavioural and attitudinal approaches (Backman & Crompton, 1991). The reviewed literature suggests that a full understanding of loyalty need to consider both motivation and satisfaction constructs simultaneously (Yoon and Uysal, 2005).

2.2. Motivation

Motivation has been defined as psychological/biological needs and wants including integral forces that arouse, direct, and integrate a person's behaviour and activity (Dann, 1981; Pearce, 1982). In cognitive social psychology motives are inextricably linked to expected outcomes of behaviour. Accordingly, the initiation of

behaviour is largely a function of expectations about future consequences of behaviour (Ross and Iso-Ahola, 1991). In psychology and sociology, the definition of motivation is directed toward emotional and cognitive motives (Ajzen & Fishbein, 1977) or internal and external motives (Gnoth, 1997). An internal motive is associated with drives, feelings, and instincts. An external motive involves mental representations such as knowledge or beliefs.

In tourism research, the motivation concept can be classified into two forces, which indicate that people travel because they are pushed and pulled to do (Dann, 1981). The push motivations are related to internal or emotional aspects and describe the tourists' desire for escape, rest and relaxation, prestige, health and fitness, adventure and social interaction, family togetherness, and excitement (Crompton, 1979). Pull motivations, on the other hand, are connected to external, situational, or cognitive aspects and are associated with the attributes of the destination choices (Cha et al., 1995; Crompton, 1979; Dann, 1981; Oh et al., 1995). Tourists are inspired by a destination's attractiveness, such as beaches, recreational facilities, cultural attractiveness, entertainment, natural scenery, shopping, and parks (Yoon and Uysal, 2005). In addition to the aforementioned pull motives the eco-motives have probably a significant impact on loyalty of ecotourists.

2.3. Quality

When visiting a destination, tourists interact with many different components of the destination (resort) product, which is a package of diverse attributes that includes not only the historical sites and spectacular scenery, but also service and facilities catering to the everyday needs of tourists (Laws, 1995). The quality of these interactions and experiences, with numerous encounters in the total holiday experience, forms the basis for overall holiday dis/satisfaction and future travel decisions (Teare, 1998). Quality of performance, which may also be termed quality of opportunity, refers to the attributes of a service which are primarily controlled by a supplier. It is output of a tourism provider (Baker and Crompton, 2000).

The majority of research on service quality has been based on the SERVQUAL model (Parasuraman et al., 1988), which suggests that service quality is measured by identifying the gaps between customers' expectations and perceptions of the performance of the service conceptualised as a multi-dimensional concept consisting of five dimensions: reliability, assurance, tangibles, empathy, and responsiveness. Researchers (Cronin and Taylor, 1992; Teas, 1993) have criticised the validity and reliability of the gap model, suggesting that measuring perception alone might provide a better indication of service quality than measuring the difference between expectations and perception. On the other hand, Ekinci and Riley (1999) suggested that service quality dimensions are contextual and not universally applicable. The SERVQUAL instrument has been widely used in a variety of sectors, including tourism.

2.4. Relationships between factors

The relationship between service quality and customer loyalty has been examined, among others, by Cronin and Taylor (1992) who reported that service quality did not appear to have a significant (positive) effect on repurchase intention in contrast to the significant positive relation between satisfaction and repurchase intention. On the other hand, Zeithaml *et al*. (1990) found a positive relationship between service quality and the willingness to a pay a higher price and the intention to remain loyal in case of price increase. Similar finding was found by Baker and Crompton (2000) that perceived quality has a stronger total effect on behavioural intentions than satisfaction. Results suggested that evaluation efforts should include assessment of both performance quality and satisfaction, but since performance quality is under management's control it is likely to be more useful measure. The same findings were obtained by Cronin, Brady and Hult (2000). They reported that a direct link between service quality and behavioural intentions was supplied by the data. Yuksel (2001) found that service quality appeared to be a significant predictor of return intentions for the first-time visitors. Caruana (2002) reported that service quality acts on service loyalty via customer satisfaction and that customer satisfaction performs a mediating role in the link between service quality and service loyalty. Taking into account that the results of all studies showed the positive relationship between service quality and loyalty we hypothesized:

H1: There is a positive relationship between service quality and loyalty.

Previous studies revealed that customer loyalty is influenced by customers' satisfaction and satisfaction is affected by travel motivation (Bitner, 1990; Dick and Basu, 1994; Oliver, 1999; Ross and Iso-Ahola, 1991; Yoon and Uysal, 2005). Therefore, we hypothesized:

H2 There is a positive relationship between ecological motivations and loyalty.

H3: The tourists of Slovenian hotels perceive different impact of quality and ecological motivation on their loyalty in comparison to the tourists of Austrian hotels.

3. METHODOLOGY

3.1. Sample

The target population was tourists spending their holidays in five spas and wellness hotels with an eco-label in Austria and tourists in five spas and wellness hotels in Slovenia during a two-month survey period from November to December 2007. The chosen hotels in Slovenia were without the ecolabel because no hotel in Slovenia had an ecolabel during the survey period. Trained research assistants carried out the questionnaire survey. A total of 613 questionnaires were obtained, 2 of which were incomplete, leaving a total of 611 usable ones. 305 usable questionnaires were from tourists spent their holidays in Slovenian hotels and 306 from tourists in Austrian hotels.

Table 1: Demographic profile of respondents

		Slovenian hotels		Austrian hotels		Total sample	
		N	Per cent	N	Per cent	N	Per cent
Gender	Men	132	43.3	122	39.9	254	41.6
	Women	173	56.7	184	60.1	357	58.4
Country of residence	Slovenia	71	25.1	0	0	71	12.3
	Austria	86	30.4	193	65.4	279	48.3
	Germany	10	3.5	50	17.0	60	10.4
	Italy	88	31.1	41	13.9	129	22.3
	Great Britain	28	9.9	11	3.7	39	6.7

The demographic profile of respondents in Slovenian and Austrian hotels as well as in the total sample is presented in Table 1. Briefly, in the total sample, 58.4 per cent were females and 41.6 per cent were males; 12.3 per cent of tourists came from Slovenia, 48.3 per cent were from Austria, 10.4 per cent were from Germany, 22.3 per cent were from Italy, and 6.7 per cent were from Great Britain. The same demographic profile is also shown for the respondents in Austrian and Slovenian hotels (see Table 1).

3.2. Measures and data analysis

This study included pull motivation variables associated with external forces and among them eco-motivation variables were under special consideration. We operationalised the pull motivation construct by 14 items assigned by exploratory and confirmatory factor analysis to four factors: environmentally friendly and healthy equipment (4 items), eco-behaviour of hotel's staff (3 items), efficient use of energy and water (4 items), and bio food (3 items) which refer to the eco-attractiveness of a hotel. A five-point scale using as the extremes '1=completely unimportant' and '5=very important' was applied as a response format for the motivation variables.

The guests' experience referring to the service quality was measured by five variables. They were: (1) quality of services at the front desk, (2) quality of services in spa and wellness centres, (3) quality of catering services, (4) quality of cleaning and maintenance services, and (5) the hotel's overall quality of services. A five point Likert scale was used with assigned values ranging from 1 being "very poor" to 5 being "very high".

Four indicators were used to measure tourist's loyalty. Three indicators were related to revisitation of the same or similar hotel and one indicator pertaining to recommendation to friends and relatives. A five point Likert scale was used to measure responses ranging from 1 being "I completely disagree" to 5 being "I completely agree".

We used factor analysis to create correlated variable composites (factors) from the original attributes ratings. The reliability of the measurement scale was assessed by Cronbach's alpha ranging from 0.778 to 0.870 indicating that chosen items performed well in capturing the measured constructs (see Table 2). For the latent constructs, the composite reliability (CR) and the average variance extracted (AVE) were also calculated.

The CR and the AVE for all six constructs surpassed the recommended value for CR of 0.7 (ranging from 0.806 to 0.941) and for AVE of 0.5 (ranging from 0.561 to 0.80).

Then multiple regression analyses were employed to explore how the ecological motives (for example, environmentally friendly and healthy equipment, eco-behaviour of hotel's staff, efficient use of energy and water, and bio food) and perceived service quality related to the dependent variable 'loyalty' within each of the hotel groups (see Table 3). The squared correlation (R^2) for the guests of Austrian hotels shows that only 18.7 per cent of the variation could be explained by the obtained regression equation. On the other hand, the regression equation for the guests of Slovenian hotels explains 44.9 percent of variations of dependent variable 'loyalty'. The F-ratios of 33.142 and 109.635 were significant at the 0.01 level for Austrian and Slovenian hotels.

The t-statistic test was used to determine significant factors contributing information to the prediction of the dependent variable 'loyalty'. The variable was considered as significant if the t-value was significant at the 0.05 level. In both regression equations the same variables were significant. They are: 'hotel service quality' and 'eco-behaviour of hotel's staff'. The relative importance of components was examined by comparing the magnitude of standardized regression coefficients. For both groups the factor with the greatest impact on the loyalty to the hotel has been hotel service quality followed by the factor eco-behaviour of hotel's staff.

Table 2: Reliability of factors

Factors	Cronbach's α	CR[a]	AVE[b]
Hotel service quality	0.870	0.941	0.80
Environmentally friendly and healthy equipment	0.856	0.837	0.563
Eco-behaviour of hotel's staff	0.792	0.806	0.561
Efficient use of energy and water	0.863	0.877	0.641
Bio-food	0.778	0.813	0.592
Loyalty to eco-hotels	0.868	0.919	0.741

[a] CR – composite reliability
[b] AVE – average variance extracted

Table 3: Loyalty drivers for Austrian and Slovenian hotels

Group	Factors	Beta	t	F	R^2
Austrian hotels	Hotel service quality	0.406	7.629*	33.142	0.187
	Environmentally friendly and healthy equipment	0.015	0.235		
	Eco-behaviour of hotel's staff	0.126	2.376*		
	Efficient use of energy and water	-0.029	-0.384		
	Bio-food	0.027	0.419		
Slovenian hotels	Hotel service quality	0.641	14.073*	109.635	0.449
	Environmentally friendly and healthy equipment	-0.026	-0.397		
	Eco-behaviour of hotel's staff	0.137	2.999*		
	Efficient use of energy and water	-0.088	-1.297		
	Bio-food	0.004	0.080		

Remark: * the difference is significant at 0.01 level

The relatively low level of R^2 (0.187) for Austrian regression equation indicates that other factors than those included in this study effect the loyalty of Austrian tourists. The relatively high measure of R^2 (0.449) for Slovenian regression equation indicates that the independent variables perform well in explaining variance of dependent variable. The highly significant F-ratio shows that the regression coefficients could hardly have occurred by chance.

The Chow test was additionally used to test whether coefficients in two linear regressions on Austrian and Slovenian hotel data sets are equal. The Chow test statistic is defined by:

$$F = \frac{(S_c - S_1 - S_2)/k}{(S_1 + S_2)/(N_1 + N_2 - 2k)}$$

where S_c is the sum of squared residuals from the total sample, S_1 is the sum of squared residuals from the sample of Austrian hotels, and S_2 is the sum of squared residuals for Slovenian hotels. N_1 and N_2 are the number of observations in each group and k is the total number of parameters. The test statistic follows the F distribution with k and N_1+N_2-2k degrees of freedom.

In our study we tested the following hypothesis

H_o: $\beta_{01} = \beta_{02}$; $\beta_{11} = \beta_{12}$; $\beta_{21} = \beta_{22}$

where β_{ij} denotes constant (i=0) and regression coefficient of independent variable i (i=1,2) for Austrian hotels (j=1) and Slovenian hotels (j=2). Hypothesis H_o is rejected because $F=14.798 > F(0.05; 2; 551)$.

Chow test shows that the salient variables (hotel service quality and eco-behaviour of hotel staff) have different impact on the guests' loyalty to Austrian and Slovenian hotels, which confirms H3.

A series of t-tests was undertaken to compare each factor's mean between Austrian and Slovenian hotels. In Table 4, some descriptive statistics of factors and the results of t-tests are given.

Table 4: Means and t-tests for Austrian and Slovenian hotels

Factor	Group	N	Mean	Standard deviation	t[a]	Cronbach's alpha
Hotel service quality	Austrian hotels	303	4.285	0.668	4.63	0.797
	Slovenian hotels	289	4.067	0.735		0.861
Environmentally friendly and healthy equipment	Austrian hotels	299	4.090	0.949	6.34	0.838
	Slovenian hotels	299	3.669	1.014		0.857
Eco-behaviour of hotel's staff	Austrian hotels	307	4.080	0.958	4.38	0.781
	Slovenian hotels	304	3.798	0.951		0.798
Efficient use of energy and water	Austrian hotels	301	3.957	1.020	3.34	0.861
	Slovenian hotels	299	3.726	1.019		0.871
Bio-food	Austrian hotels	305	3.928	1.041	5.32	0.761
	Slovenian hotels	304	3.568	1.029		0.796
Loyalty	Austrian hotels	305	4.383	0.677	6.11	0.774
	Slovenian hotels	307	4.075	0.768		0.846

[a] all $p < 0.01$

Taking into account the significance of mean differences at the 0.01 level we can conclude the guests' loyalty to Austrian hotels has been higher than the guests' loyalty to Slovenian hotels.

4. CONCLUSIONS

The results reported in this article suggest that among the following factors: hotel service quality, environmentally friendly and healthy equipment, eco-behaviour of hotel's staff, efficient use of energy and water, and bio food only hotel service quality and eco-behaviour of hotel's staff have significant impact on the guests' loyalty to the hotel. The guests' loyalty to Austrian hotels has been higher than the guests' loyalty to Slovenian hotels. The guests of Austrian hotels perceived higher level of service quality in their hotels and had higher ecological motivation about environmentally friendly attributes of hotel service. The results of regression analysis also show that Slovenian hotels have the opportunity to increase the loyalty of their guests more than Austrian hotels by improving the hotel service quality and by attracting the tourists with higher level of ecological expectations. We hope that this finding will encourage the Slovenian hotel's management to invest their inputs in achieving better quality of hotel service and higher level of ecological factors.

The study also reveals that eco-label attracts the tourists with higher level of ecological motivations and it contributes to higher perception of all attributes referring to service quality. All these finding enable us the conclusion that that the investment in the eco-label will probably improve the attractiveness and competitiveness of hotels on tourist market.

REFERENCES

Ajzen, I. and Fishbein, M. (1977), "Attitude-Behavior relations: A theoretical analysis and review of empirical research", Psychological Bulletin, Vol. 84, pp. 888-918.

Baker, D. A. and Crompton, J. L. (2000), "Quality, Satisfaction and Behavioural Intentions", Annals of Tourism Research, Vol. 27, No. 3, pp. 785-804.

Backman, S. J., and Crompton, J. L. (1991), "The usefulness of selected variables for predicting activity loyalty", Leisure Science, Vol. 13, pp. 205-220.

Bitner, M. J. (1990), "Evaluating service encounter: The effects of physical surroundings and employee responses", Journal of Marketing, Vol. 54, pp. 69-82.

Bohdanowicz, P. (2005), "European Hoteliers' Environmental Attitudes", Cornell Hotel and Restaurants Administration Quarterly, Vol. 46 (2), pp.188-204.

Caruana, A. (2002), "Service loyalty - The effects of service quality and the mediating role of customer satisfaction", European Journal of Marketing, Vol. 36 (7/8), pp. 811-828.

Cha, S., McCleary, K., and Uysal, M. (1995), "Travel motivation of Japanese overseas travellers: A factor-cluster segmentation approach", Journal of Travel Research, Vol. 34, No.1, pp. 33-39.

Crompton, J. L. (1979), "Motivations of pleasure vacation", Annals of Tourism Research, No. 6, pp. 408-424.

Cronin, J. and Taylor, S. (1992), "Measuring service quality: a re-examination and extension", Journal of Marketing, Vol. 56, pp. 55-68.

Cronin, J. J. Jr., Brady, M. K., and Hult, G. T. M. (2000), "Assessing the effects of Quality, Value, and Customer Satisfaction on Consumer Behavioral Intentions in Service Environments". Journal of Retailing, Vol. 76, No. 2, pp.193-218.

Dann, G. M. (1981), "Tourism Motivations: An appraisal", Annals of Tourism Research, Vol. 8, No. 2, pp. 189-219.

Dick, A. S., and Basu, K. (1994), "Customer loyalty: Toward an integrated conceptual framework", Journal of the Academy of Marketing Science, Vol. 22, No. 2, pp. 99-113.

Dimanche, F., and Havitz, M. E. (1994), "Consumer behaviour and tourism: Review and extension of four study areas", Journal of Travel and Tourism Marketing, Vol. 3, No.3, pp. 37-58.

Flavian, C., Martinez, E., and Polo, Y. (2001), "Loyalty to grocery stores in the Spanish market of the 1990s" Journal of Retailing and Consumer Services, Vol. 8, pp. 85-93.

Ekinci, Y. and Riley, M. (1999), "Measuring hotel quality: back to basics", International Journal of Hospitality Management, Vol. 11, pp. 287-293.

Gnoth, J. (1997), "Tourism motivation and expectation formation", Annals of Tourism Research, Vol.21, No.2, pp. 283-301.

Jacoby, J. and Chesnut, R. W. (1978), Brand loyalty measurement and management, Wiley, New York.

Laws, E. (1995), "Tourist Destination Management Issues, Analysis and Policies" London: Routledge.

Oh, H. C., Uysal, M., and Weaver, P. (1995), "Product bundles and market segments based on travel motivations: A canonical correlation approach", International Journal of Hospitality Management, Vol 14, No. 2, pp. 123-137.

Oliver, R. L. (1999), "Whence consumer loyalty?", Journal of Marketing, Vol. 63, No. 33-44.

Parasuraman, A., Zeithaml, V. and Berry, L. (1988), "SERVQUAL: multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, Vol. 64, pp. 12-40.

Pearce, P. L. (1982), "The social psychology of tourist behavior. Oxford: Pergamon Press.

Ross, E. L. D. and Iso-Ahola, S. E. (1991), "Sightseeing tourists' motivation and satisfaction", Annals of Tourism Research, Vol. 18, pp. 226-237.

Teare, E. R. (1998), "Interpreting and responding to customer needs", Journal of Workplace Learning, Vol. 10, No. 2, pp. 76-94.

Teas, R.K. (1993), "Expectations, performance evaluation and consumer's perceptions of quality", Journal of Marketing, Vol. 57, pp. 18-34.

Zeithaml, V., Parasuraman, A. and Berry, L. (1990), "Delivering Quality Service: Balancing Customer Perceptions and Expectations", NY : The Free Press.

Zeithaml, V., Berry, L. and Parasuraman, A. (1996), "The behavioral consequences of service quality", Journal of Marketing, Vol. 60, pp. 31-46.

Yoon, Y., and Uysal, M. (2005), "An examination of the effects of motivation and satisfaction on destination loyalty: a structural model", Tourism management, Vol. 26, pp. 45-56.

Yuksel, A. (2001), "Managing customer satisfaction and retention: A case of tourist destination, Turkey", Journal of Vacation Marketing, Vol. 7, No. 2, pp. 153-168.